

Chairperson: Bob Wyatt, NW Natural
Treasurer: Fred Wolf, Legacy Site Services for Arkema

April 16, 2012

Lori Cora US EPA 1200 Sixth Avenue, Suite 900 ORC-158 Seattle, Washington 98101 Chip Humphrey US EPA 805 SW Broadway, Suite 500 Portland, Oregon 97205

Vinh Pham Bank of the West PO Box 1121 San Jose, California 95108-1121

RE: Portland Harbor Superfund Site RI/FS Trust Fund

Lower Willamette Group Claim Certificate LWG-029

Dear Ms. Cora, Mr. Humphrey, and Mr. Pham;

At the request of the Lower Willamette Group, enclosed is Claim Certificate LWG-029 for the Portland Harbor Superfund Site Remedial Investigation and Feasibility Study Trust Fund. The purpose of the Claim Certificate is to request a payment from the Trust Fund for work performed under the US Environmental Protection Agency Settlement and Order as part of Section 26 of the Administrative Order on Consent for the Portland Harbor Superfund Site.

The total for Claim Certificate LWG-029 is \$168,484.58 with a payment to Anchor/QEA. The work detailed in Claim Certificate LWG-029 was performed by Anchor/QEA during December 2011 and January 2012. The attached Claim Certificate includes a summary of the payee amount, a description of the tasks performed, and a summary table from the payee.

If there are any questions regarding this Claim Certificate, please contact either Hans Feige of Feige & Associates at 503-543-9700 or Fred Wolf of Legacy Site Services at 253-535-7256.

Sincerely;

Hans Feige

Feige & Associates, Inc.

Cc: Kelly Madalinski; Port of Portland

Bob Wyatt; Northwest Natural Gas

Kim Cox; City of Portland

Fred Wolf; Legacy Site Services David Ashton; Port of Portland

Jennifer Woronets; Anchor QEA

Claim Certificate LWG-029 April 16, 2012

Certification

The following invoice is for Remedial Investigation and Feasibility Study activities performed at the Portland Harbor Superfund Site in accordance with the Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study, Docket Number CERCLA 10-2001-0240. The purpose of this invoice is to request the Trustee to make a payment from the Trust Fund established by the Lower Willamette Group to pay for work performed for the Site. This invoice is for work that has been generally discussed with the US Environmental Protection Agency (EPA).

Summary of Activities

Anchor/QEA - December 2011 (see attached Table 1)

1) Definition of AOPCs/SMAs Final SMAs for FS Report	\$775.50
 Disposal Site Screening Cost Feasibility Uncertainty Analysis for Alts. 	\$2,271.00
3) Sediment Transport Analysis HST Hybrid Model Runs	\$458.00
4) ARAR Analysis and RAO Development RAOs Refinement	\$1,504.00
5) Construction Impacts Evaluation Final Impacts Evaluation (detailed alts)	\$1,582.40
6) Habitat Mitigation Requirement Revise Framework and Develop FS Appendix	\$3,109.80
7) Recontamination and Natural Recovery Evaluation Detailed Model Runs	\$22,237.00
8) Feasibility Study Report Write Upfront Sections (Source, RAOs, PRGs, SMAs) Development and Screening Alts Detailed Evaluation of Alts Write End Sections (Conclusion, Flexible Alts., Sequence) Appendices	\$110.00 \$543.00 \$2,068.00 \$1,637.64 \$3,820.18
Total	\$40,116.52
Anchor/QEA – January 2012 (see attached Table 2)	
9) Definition of AOPCs/SMAs Final SMAs for FS Report	\$2,229.00
10) Disposal Site Screening Cost Feasibility Uncertainty Analysis for Alts.	\$4,071.10
11) Sediment Transport Analysis HST Hybrid Model Runs	\$4,748.00
12) ARAR Analysis and RAO Development RAOs Refinement	\$2,601.00

13) Construction Impacts Evaluation Final Impacts Evaluation (detailed alts)	\$14,290.48
14) Recontamination and Natural Recovery Evaluation Detailed Model Runs	\$32,186.26
15) Feasibility Study Report Develop Areas and Volumes Write Upfront Sections (Source, RAOs, PRGs, SMAs) Identification and Screening of Technologies Development and Screening Alts Detailed Evaluation of Alts Appendices Revise per LWG Comments	\$4,134.00 \$974.86 \$2,664.00 \$3,714.00 \$25,935.00 \$5,342.40 \$21,253.96
16) PRG and SMA Uncertainty Analysis Optimizing Remediation Areas Analysis	\$4,224.00
Total	\$128,368.06
Certificate Total	<u>\$168,484.58</u>

Descriptions of Activities

- 1) Definition of AOPCs/SMAs tasks included SMA calculations to support comment response.
- 2) Disposal Site Screening tasks included completing backup information to the Draft FS report.
- 3) Sediment Transport Analysis tasks included review of MNR comments and response to questions.
- 4) ARAR Analysis and RAO Development tasks included revising water screening based on new Oregon criteria.
- 5) Construction Impacts Evaluation tasks included review and response to LWG comments and developing backup information for the Draft FS report.
- 6) Habitat Mitigation Requirement tasks included review and respond to LWG comments.
- 7) Recontamination and Natural Recovery Evaluation tasks included uncertainty analysis model runs.
- 8) Feasibility Study Report tasks included issuing the Draft FS report to the LWG, revised hot spot analysis, analysis of LWG comments/response, post delivery internal reviews of the Draft FS, organization of backup materials, and development of the Draft FS appendices.
- 9) Definition of AOPCs/SMAs tasks included SMA evaluations and revisions.
- 10) Disposal Site Screening tasks included revisions to disposal sections of Draft FS report.
- 11) Sediment Transport Analysis tasks included revisions to the MNR evaluations in the Draft FS report.
- 12) ARAR Analysis and RAO Development tasks included continued revised water screening based on new Oregon criteria.
- 13) Construction Impacts Evaluation tasks included revised habitat and 404b1 analysis.
- 14) Recontamination and Natural Recovery Evaluation tasks included uncertainty analyses of model runs and MNR section revisions.

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- 15) Feasibility Study Report tasks included revised hot analysis, analyses for LWG comment/response, and revisions to Draft FS sections.
- 16) PRG and SMA Uncertainty Analysis tasks included uncertainty analysis revisions.

Action Required

This certificate is being sent to both the EPA Attorney and the EPA Project Coordinator at their respective addresses in both electronic and print copy. The Trust details that if the EPA objects to any payment request in the Claim Certificate, the EPA must provide the LWG an Objection Notice within 30 days of the date in which this Certificate was delivered. If, after 30 days, no objection has been received, the payment shall be made to the LWG from the Trust by the Trustee.

Certification Signature

Bob Wyatt

LWG Chairperson Northwest Natural TABLE 1

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Lower Willamette Group Anchor QEA Progress Report - December 2011

Anchor QEA 2012 PS Budget Estimate for Known Tasks as of January 6, 2012 December 2011 through November 2012 (for known tasks as of January 2012)

No.	Taşk	SubTask	2012 Budget Estimate	Provious Amount Spent To Date	Amount Spent This Month	Amount Spent To Date	Remaining Budget	Percent of Bedget Spent	Percent of Task Work Complete
	•								•
28 2b 2c 2d 2y 2y 2z	Definition of ADPCs/SMAs	Refined AOPCs SINA Development AOPC/SINA Revision per EPA RA Comments Final SINAs for FS Report		. •	\$775.50				
3 3a 3b 3c 3d 3y 3z	Disposal Site Screening	Coordination with Outside Entities Revised Screening Additional Information Development Cost/Feasibility Uncertainty Analysis for Alts.			\$2,271.00				
4 4b 4c 4d 4v 4z	Sediment Transport Analysis	HST Erosional Areas/Cap Stability Runs HST Hybrid Model Runs Wind wave and Propwesh Analysis Complete Combined Stability Analysis			* ±458.00				
6 6a 6b 6y	ARAR Analysis and RAO Development	RAOs Refinement ARARs Refinement			\$1.504.00	<u>-</u>			
62				į					
8 8a 8b 8y 8z	Construction Impacts Evaluation	Preliminary impacts evaluation (alts screening) Final immerts multi-stion (detailed alts)			\$1.582.40				
9 90 90 90 90 92	Habitat Milipation Requirement	Framework development Interface with NOAA Revise Framework and Develop FS Appendix			\$3.109.80				
1		Ties.			,				
11 11a 11b 11c 11d 11y	Recontamination & Natural Recovery E	valuation Final Model Calibration Preliminary Model Runs Detailed Model Runs Sequencing Evaluation		ļ	\$22.237.00				
12 12a 12b 12c 12c 12d 12e		Develop Areas and Volumes Write Upfront Sections (Source, RAOs, PRGs, SMAs) Identification and Screening of Tech. Development and Screening Alts Octalied Evaluation of Alts	*		\$110.00 \$543.00 \$2.068.00	-			
124 12a 12h 12y 12y 12z		Write End Sections (Conclusion, Rexible Alts, Sequence) Appendices Revise per LWG Comments			\$1,637.64 \$3.820.18				

Total: \$40,116.52

TABLE Z

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Lower Willamette Group Anchor QEA Progress Report - January 2012

Anchor QEA 2012 FS Budget Estimate for Known Tasks as of January 6, 2012 December 2011 through November 2012 (for known tasks as of January 2012)

No.	Task	SubTask	2012 Budget Estimate	Previous Amount Spent To Date	Amount Spent This Month	Amount Spent To Date	Remaining Budget	Percent of Budget Spent	Percent of Task Work Complete	
	·									
2 2a 2b 2c 2d 2y 2z	Definition of AOPCs/SMAs	Refined AOPCs SMA Development AOPC/SMA Revision per EPA RA Comments Final SMAs for FS Report			\$2,229.00					
3 3a 3b 3c 3d 3y 3z	Disposal Site Screening	Coordination with Outside Entities Revised Screening Additional Information Development Cost/Feasibility Uncertainty Analysis for Alts.			\$4,071.10	-			•	÷
4 4a 4b 4c 4d 4y 4z	Sediment Transport Analysis	HST Erosional Areas/Cap Stability Runs HST Hybrid Model Runs Wind wave and Propwash Analysis Complete Combined Stability Analysis			\$4,748.00					
6 6a 6b 6y 6z	ARAR Analysis and RAO Developmen.	RAOs Refinement ARARs Refinement			\$2.601.00					
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8 8a 8b 8y 87	Construction Impacts Evaluation	Preliminary impacts evaluation (alts screening) Final impacts evaluation (detailed alts)			\$14,290.48					
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:		μ								
11 11a 11b 11c 11d 11y 11z	Recontamination & Natural Recovery E	valuation Final Model Calibration Preliminary Model Runs Detailed Model Runs Sequencing Evaluation		_	\$32.186.26					
112 12 12a 12b 12c 12d 12d	Feasibility Study Report	Develop Areas and Volumes Write UpFront Sections (Source, RAOs, PRGs, SMAs) Identification and Screening of Tech. Development and Screening Alts Detailed Evaluation of Alts			\$4,134,00 \$974.86 \$2,664.00 \$3,714.00 \$25,935.00					
12f 12g 12h 12y 12z		Write End Sections (Conclusion, Flexible Alts, Sequence) Appendices Revise per LWG Comments		_	\$5,342,40 \$21,253,96					

TABLE 2

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	No.	Task	SubTask	2012 Budget Estimate	Previous Amount Spent To Date	Amount Spent This Month	Amount Spent To Date	Remaining Budget	Percent of Budget	Percent of Task Work Complete
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ı	17	PRG and SMA Uncertainty Analysis		T 1	1
ı	17a		Natural Neighbor Contouring Analysis	1	
1	17b		Impact of Non-detect on AOPC Mapping Analysis	1	
ı	17c	i	Mapping of Alternate Key PRGs		I
ı	17d		Optimizing Remediation Areas Analysis	4	\$4,224,00
1	17e	ľ	Coordination Task	1	1
1	17y		-hitan	, 1	1
ı	17z			1	

TOTAL: 128,368.06